DOCUMENT RESUME

ED 409 644 EA 028 507

AUTHOR	Thomas, Cheryl; O'Connell, Raymond W.
TITLE	Parent Perceptions of Block Scheduling in a New York State Public High School.
PUB DATE	Apr 97
NOTE	24p.; Paper presented at the Annual Meeting of the New England Educational Research Organization (Portsmouth, NH, April 30-May 2, 1997).
PUB TYPE	Reports - Research (143) -- Speeches/Meeting Papers (150)
EDRS PRICE	MF01/PC01 Plus Postage.
DESCRIPTORS	*Block Scheduling; High Schools; *Parent Attitudes; Parent Participation; *Parent School Relationship; Public Schools; *School Schedules; *Time Blocks; Time Factors (Learning)
IDENTIFIERS	*New York

ABSTRACT

Although parents are key stakeholders in the educational process, their perceptions are often neglected in studies of school reform. This paper presents findings of a study that explored the attitudes of parents of New York State high school students toward block scheduling. A survey of all parents of 11th and 12th graders in a rural New York high school garnered a 70 percent response rate (n=110). Parents were asked to compare their attitudes to a block-schedule program before and after its implementation. Findings showed no correlation between the number of meetings that parents attended and their support for block scheduling. Parents perceived that block scheduling resulted in increased time for class discussions and student interaction with teachers. However, parents perceived problems involving students' retention of material, teacher absences, and student absences. The majority of parents supported block scheduling but did so without clear evidence of academic improvement. Many parents reported that their understanding of block scheduling improved through talks with their children rather than through school information-dissemination efforts. Fifty percent reported no change in their opinions about block scheduling. Six figures are included. (LMI)

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Parent Perceptions of Block Scheduling in a New York State Public High School

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Paper Presented at the Annual Meeting
of the New England Educational Research Organization
April 30 - May 2, 1997
Portsmouth, NH

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PARENT PERCEPTIONS OF BLOCK SCHEDULING IN A NEW YORK STATE PUBLIC HIGH SCHOOL

INTRODUCTION

Time management modifications in education have characterized some of the school reform efforts during the past several decades. Suggestions have included lengthening the school day (Oregon, 1970), lengthening the school year (Bradford, 1992), and increasing the number of courses students take per day (Flummerfelt, 1986.) All of these have met resistance from students, parents, and teachers. Flexible scheduling (Goldman, 1983) was popular for a while in the 1970s. In addition to these possibilities, in 1991 the National Education Commission on Time and Learning began studying the effects of a reorganized school day (Anderson, 1994).

The "essential" high school, according to Theodore Sizer (1988) requires, among other things, student mastery of subjects, cooperation between students in problem solving, and instruction tailored to the individual. While Sizer gave education the "what", it remained for others to discover the "how".

Subsequent research has found that the amount of time spent learning, decisions on student grouping, use of space, and method of instruction are all related to Sizer's definition of the essential high school and are all determined or influenced by the type of scheduling in a school (Kruse & Kruse, 1995). This study examined parent reactions to one such time-based innovation in a New York State public high school.

RATIONALE

As early as 1963, John Carroll realized the potential of the schedule as an instrument of positive change within school districts. He believed that although children were born with aptitude, ability and propensity for learning, these characteristics could be maximized by manipulating the amount and arrangement of the time spent in each subject (Carroll, 1963). Time-allocation is an area of school

management that is easily controlled; therefore, if the restructuring of the schedule will help students achieve, then it should be used to do so.

Some flexibility was gained by using a block time scheduling which paired normal 45 minute periods for the purpose of interdisciplinary instruction. Teachers could choose to take both periods on alternate days, teach together for both periods, or use double periods for special projects, etc. (Williamson, 1993). Some schools have utilized the double period to combine science classes with labs (Gerking, 1995),others with science and mathematics classes (Day, 1995).

Joseph Carroll (1994a) believed that the traditional high school schedule of seven to nine 45-minute-periods per day was ineffective. He designed a type of schedule using fewer and longer periods per day, which he called The Copernican Plan. Carroll's plan was first used in Massachusetts, offering 120 minute classes, reduced class sizes, individualized instruction, differentiated diplomas, and mastery based credits (Carroll, 1990).

High schools in several states modified Carroll's Copernican Plan to fit their own needs and the educational requirements of their states. In one form of high school block scheduling, students stay with one teacher, studying one subject, for four hours every day for 30 days. An alternate form schedules two two-hour classes each day for one trimester (Carroll, 1987). Both of these forms include a smaller block of time for extra help and another smaller block of time for student seminars. In another form, six classes are taken for the entire year, but on alternate days in order to accommodate 90 minute class periods. In yet another form, each 90 day semester consists of three to four classes meeting for 90 minutes each. It is this last modification which has been adopted by the New York state high school in this study. The most widespread forms of block scheduling are described by Canady and Rettig (1995) in their book, ***Block Scheduling***.

The Copernican Plan designed by Joseph Carroll (1989) is purported to help decrease discipline problems. Fewer class changes would cut down on the number of times students would be in the hallways and bathrooms, decreasing opportunities for unsupervised and potentially disruptive behavior. Block scheduling according to the Copernican Plan could potentially increase student achievement, reduce the number of students per class, improve teacher-student relationships, provide a lighter work load for both teachers and students, discourage drop-outs, provide student seminars for

discussions on important issues(Carroll, 1994b), and have the economical advantage of being able to increase the number of courses offered without having to add more faculty (Canady & Fogliani, 1989; Carroll, 1990).

Not all educators believe that block scheduling is without drawbacks. A research study by Von Mondfrans (1972), showed that although the more mature students fared better than less mature students with the block schedule, there were no significant differences overall in the attitudes and interest toward learning of students in traditional 45 minute classes and those attending block classes of identical subjects. This study also found that teachers had difficulty adjusting to the longer class periods.

A comparison of the National Business Entrance Test scores of Ohio high school students in traditionally scheduled and blocked scheduled business courses indicated no significant differences in achievement between the two groups (Steagall, 1968).

An examination of the modified Copernican Plan used in Nelson, British Columbia (Reid, Hierck, & Veregin, 1994) revealed that although student failure rate decreased in most subjects, it increased in history, English and geography and remained the same in chemistry and French. Teachers expressed concerned about student retention and an uneven distribution of the "tough" courses throughout the year. Students complained that they were sometimes overwhelmed with the amount of material that needed to be covered in such a short period of time. They also had difficulty making up missed work due to absences since one day missed included an enormous amount of material covered by the rest of the class.

There have been several recent studies on student retention (Wisconsin, 1995), achievement (Carroll, 1994b) and stress (Hackman, 1995; Schoenstein, 1995) in schools using block scheduling in order to determine the relationship of these areas to block scheduling.

For example, block scheduling was implemented in the Ramey School in Puerto Rico (Hinman, 1992) as one part of a larger program to improve problems in discipline, student and teacher satisfaction, student achievement, as well as a change toward cooperative learning. Follow up studies (Hinman, 1992) showed a statistically significant improvement in all of these areas.

The block schedule was also used in a California high school along with a program that paired adults and low-achieving students with the intention of improving the total school climate as well as the academic performance of these students. One study (Shore, 1995) indicates that these two programs succeeded in improving the timbre of the school. However, this study neglected to show how the effects of the separate programs may have been confounded.

A study of block scheduling in a Florida high school by Buckman (1995) also showed the strongest improvement in the area of school climate, with some improvement in attendance and grade point averages. A Colorado high school studied after five years of block scheduling confirmed these results, showing in particular a reduced stress level among students (Schoenstein, 1995).

A study of the effects of block scheduling in high school English classes on student achievement, student attitude toward block scheduling and teacher satisfaction with the program produced mixed results (Reid, 1995). A large percentage (90%) of the teachers said they liked the block schedule. Although students believed they had improved their writing skills, many indicated that they did not see an overall improvement in achievement in other areas, such as reading comprehension.

A block schedule with four 90 minute classes was implemented in Governor Thomas Johnson High School in Frederick, Maryland in 1992 and evaluated three years later (Guskey, 1995). Students showed little variation in achievement when compared to achievement under traditional scheduling. Discipline problems dramatically decreased. Attitudes of students and teachers were positive toward block scheduling, with 70% of students and 95% of teachers indicating a preference for block scheduling over traditional scheduling.

This same type of block schedule was implemented in two Tennessee high schools. Surveys there on teacher and administrator perceptions of the program showed that the majority of the faculty and administration ***liked*** block scheduling, but there were no indications as to why, except for two teachers who reported a readiness for "change" and four teachers who enjoyed the longer planning periods (Davis-Wiley, 1995). There was no indication of a connection to student achievement.

Since there are conflicting reports on the benefits of block scheduling, it is necessary to further study this method of school reform. Most of the studies have been of faculty and administrative attitudes toward block scheduling. A few studies have included students' perceptions. Although parents are key

stakeholders in the educational process, both financially and emotionally, their opinions and perceptions are often neglected in studies of school reforms. Our review of the literature revealed virtually no studies on parent's attitudes or perceptions of block scheduling.

The purpose of this study will be to determine the attitudes of the parents of New York state public high school students toward block scheduling, and to closely examine the reasons for their views. Do parents report the advantages so often cited in the literature on block scheduling? Has block scheduling met a need in this high school community? Has it lived up to its promises of greater student achievement, improved student-teacher relations, fewer disciplinary problems, fewer drop-outs, smaller classes, more course offerings, and a lighter work load? Do parents view this as a program that will help or hinder the academic success of their children?

RESEARCH QUESTIONS

Research questions included in the study concentrate on parent perceptions of block scheduling in the following areas:

I. Do parents perceive that block scheduling improves discipline problems in school?

II. Do parents perceive that block scheduling improves student achievement?
   A. Does block scheduling increase the number of courses offered?
   B. Has there been a change in the amount of homework?

III. Do parents perceive that block scheduling improves the nature of student-teacher interactions?

IV. Do parents perceive that block scheduling leads to increased student enjoyment of school?

V. Do parents support block scheduling?

VI. Is the acceptance of block scheduling by parents dependent on the parent's
   A. Gender?
   B. Educational level?
   C. Socioeconomic status?
   D. Race?
   E. Age?
   F. Exposure to information about the program prior to implementation?

The researchers hypothesized that parents' attitudes toward block scheduling would change as a result of implementation, and that this change would be independent of gender, educational level, SES, and race and dependent on the amount of information received about the program and the amount of perceived change due to block scheduling. Based on the literature review, it was also hypothesized that parents would perceive a difference in the amount of homework, the classroom atmosphere, the nature of student-teacher relationships, opportunities for advancement, and the number of courses offered as a result of block scheduling in their school and that these variables would affect their view of block scheduling.

BACKGROUND INFORMATION

Block scheduling in high schools is a fairly recent phenomenon in New York state, beginning with the high school in this study during the 1994-95 school year. This high school is in a rural district categorized as an average need-to-resource-capacity school district by the 1996 New York state Report Card. The 1996 Report Card data show that the suspension rate for this district is 7.5% compared to a national average of 4.5%, but the drop out rate is only 3.2% compared to the national average of 4.1%. Total expenditure per pupil in this district is approximately 7.9% less than the average statewide per pupil expenditure.

The administration and faculty of this school were influenced by the writings of Theodore Sizer and Joseph Carroll. Believing in the promises of block scheduling, they visited a school in Massachusetts already using the block scheduling plan before modifying it for use in their own school. A tentative step toward full implementation was made in the first year as a pilot program was tried with selected courses. By the second year they were convinced that block scheduling would benefit the entire junior and senior high school student population and so fully utilized their modified Copernican Plan. This is the third year of block scheduling in this school. The seniors graduating this year will be the last of this high school's population to have known traditional scheduling.

METHODOLOGY

All parents of 11th and 12th grade students from a New York state public high school were asked to complete a 28-question survey on several of the issues raised by the proponents of block scheduling: classroom timbre, student-teacher relationships, the amount of homework, and academic performance. The questionnaire asked parents to compare their experiences before and after implementation of block scheduling. Questions use a Likert-type scale from 1 to 5. In addition, parents were asked to indicate gender, age, race, highest educational level achieved, whether their children received free or reduced lunch, and the number and grade level of children they had attending this junior/senior high school. The response rate from the mailed surveys was approximately 30%. Follow up was done by phone, contacting the parents who had not responded by mail and asking them to complete the survey over the phone. Due to disconnected phone lines and relocation of some families, the researchers were unable to contact every parent. However, the total response rate was 70% (N= 110) for the parent surveys.

DATA ANALYSIS

The data were organized on a Likert-type scale for parent perception of their child's academic performance, school behavior, and amount of homework, as well as parent opinion on block scheduling in general and on how well informed they felt they were. The frequency, mean, and standard deviation were calculated for each of these variables. Nominal data collected included choices on the type of block scheduling used in this high school, the number and grades of children parents had attending this high school, gender, race, age, parent level of education, and information on socioeconomic status. T-tests were used to compare mean scores before and after implementation of block scheduling and correlations were calculated as deemed appropriate among the continuous variables. Chi Square anahyses were used to compare parents attitudes toward block scheduling by gender, race, age, socioeconomic status, educational level and perceived level of change.

RESULTS AND DISCUSSION

Parent Perception of Change

Parents saw only a slight improvement in their children's behavior and academic performance when comparing the traditional schedule to the block schedule. Most parents perceived their children as being average to above average in academic performance both before (88%) and after (90.7%)the implementation of block scheduling. Parent perception of their children's academic performance is pictured in Figure 1. The mean difference before and after in perceived academic performance was .019. Parents also perceived their children as behaving very well in school both before (82.2%) and after (86.1%) the implementation of block scheduling, with a mean difference in behavior of .056. These results indicate that parents perceive that block scheduling has little effect on student behavior (see Figure 2).

Homework was the only area in which parents reported a significant change (see Figure 3). Prior to block scheduling, students were required to complete an average of 1-2 hours of homework per night according to parents. Under the block schedule, students have less than one hour of homework per night. The explanation, according to comments offered by some parents, is that students are given more time *during* the 90 minute classes to work on what had traditionally been considered homework.

Figure 1: Parent Perception of Their Child's Academic Achievement
Before and After the Implementation of Block Scheduling

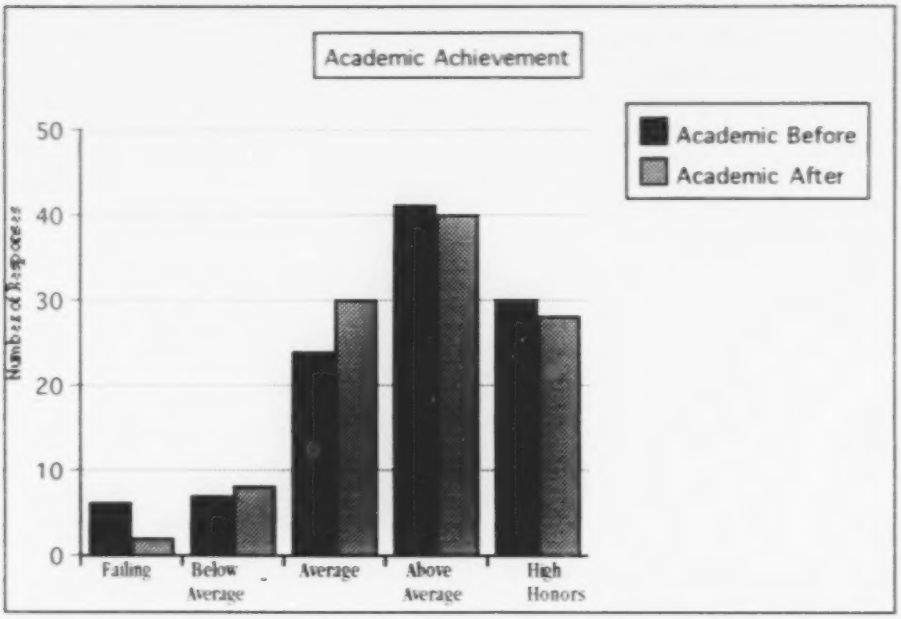


Figure 2: Parent Perception of Their Child's Behavior
Before and After the Implementation of Block Scheduling

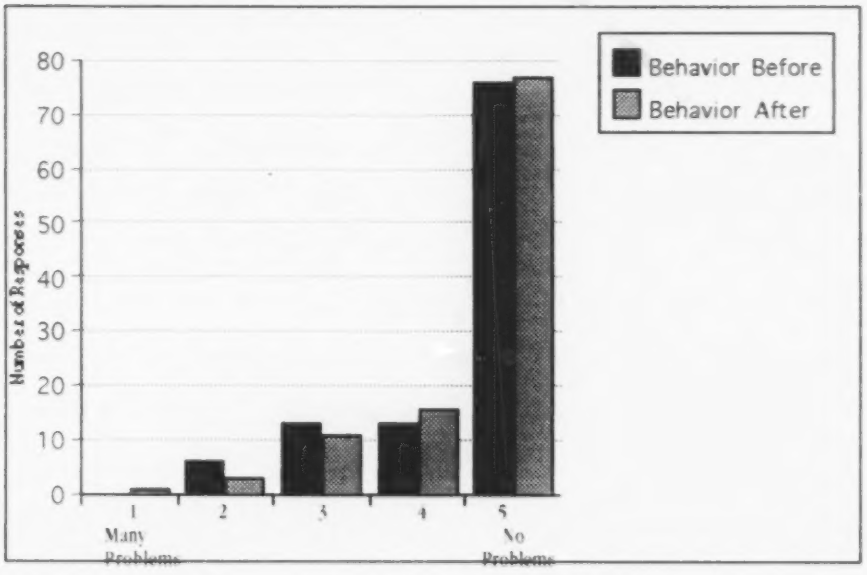
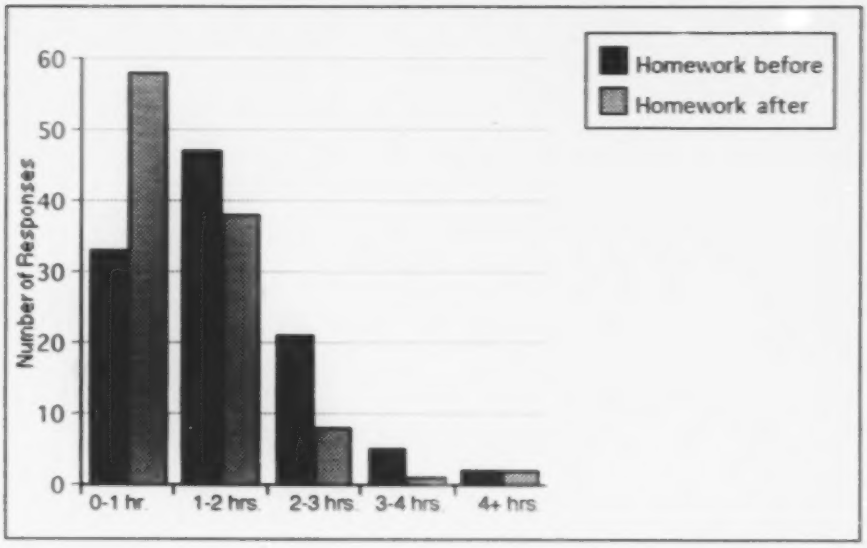


Figure 3: Parent Perception of Amount of Homework
Before and After the Implementation of Block Scheduling



Parent Understanding

A t-test indicated a significant relationship ($M(b)=1.06$, $M(a)=.60$, $t=-2.45$, $p\leq.02$)between the number of meetings attended by parents before and after the implementation of block scheduling. On closer examination, it was found that the average number of informational meetings on block scheduling attended by parents before the implementation of block scheduling was 1.1, and after implementation was .602. These results were skewed, however, by the inclusion of several parents who were also board members and who reported that they attended between 10 and 24 meetings each. Therefore, the mode is considered the most reliable source of data for this question. Most parents attended *no* meetings either before or after the implementation of block scheduling. These results indicate that this strategy by school administrators was ineffective in communicating with parents. It is likely that parents received information from other formal and informal sources.

In spite of a lack of participation in the meetings on block scheduling, parents reported an increase in understanding of the block scheduling program after its implementation, with 45.9% of parents saying they understood it very well. This self-perception was supported by questions on the

survey which elicited a "correct" response: 93.5% knew how long the block classes were, 89.8% knew how often the major subjects met, and 82.2% understood that subjects were completed in one semester. Only 23.6% of the parents said they understood block scheduling very well before it was implemented in this school. A t-test showed a significant difference ($M(b)= 3.15$, $M(a)=4.0$, $t=6.28$, $p\leq.001$) in the self-reported understanding of block scheduling by parents before and after the implementation of block scheduling (See Figure 4). Many parents reported that this increased understanding was a result of discussion about block scheduling with their children, not from any of the attempts by the school to inform them.

Parent Support

There was a high correlation ($r=.6471$, $p<.001$) between the support parents reported before block scheduling and the support they reported following the implementation of block scheduling. The descriptive data showed that 50% of the parents had no change in opinion at all. Of the remaining 50% of the parents, 7.7% liked block scheduling slightly less after it was implemented and 38.5% liked it slightly more. Only 3.8% of the parents increased their opinion of block scheduling more than slightly. As a result of these changes in opinion by half of the parents, a t-test between parent support before and after the implementation of block scheduling indicated a significant difference ($M(b)=3.14$, $M(a)=3.75$, $t=5.44$, $p<.001$) in this area. A total of 45 parents (41.7%) reported that they currently support block scheduling very much, 19 parents (17.6%) are generally enthusiastic, 25 parents (23.1%) could take it or leave it, 7 parents (6.5%) don't like it much, and 12 (11.1%) do not support it at all (See Figure 5).

Figure 4: Parental Understanding of Block Scheduling
Before and After Implementation

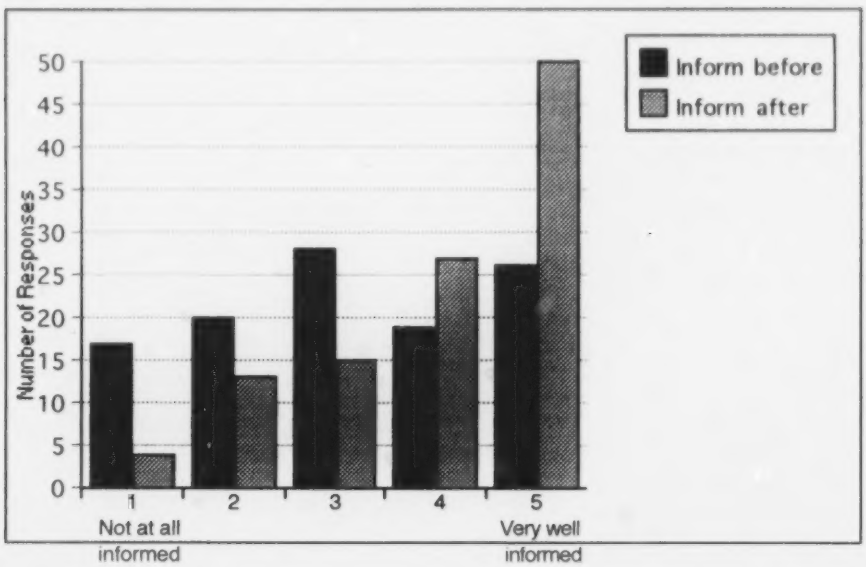
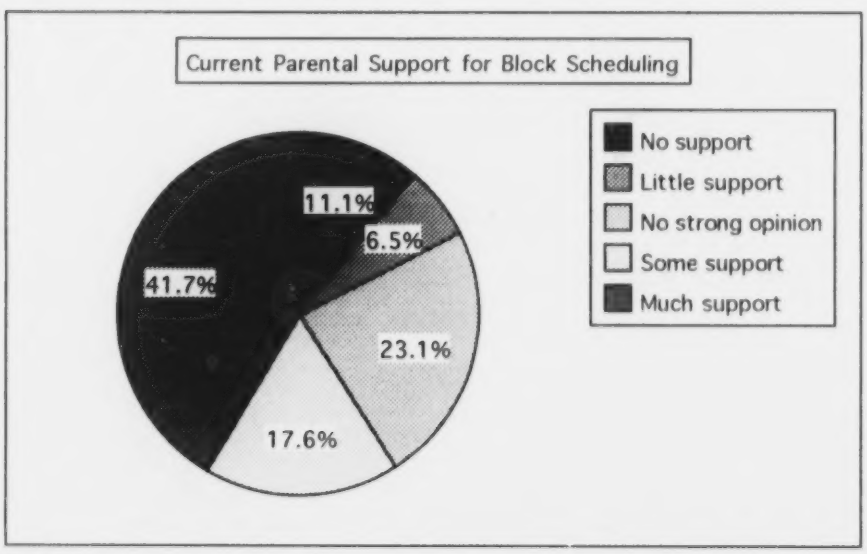


Figure 5: Current Parental Support for Block Scheduling
in a New York state public high school



The Influence of Background Variables

Correlations among parent attitudes toward block scheduling and gender, race, age, socioeconomic status, educational level and perceived level of change showed no significant associations between these variables at the $p<.05$ level.

Perceived Benefits of Block Scheduling

Qualitative data collected indicate that parents see the following as the major benefits of block scheduling:

More opportunities for students to discuss important issues in class (75.2%)
Students spend more time with the teachers (73.3%)
Their own children do better academically with fewer classes (70.5%)
Their own children learn more in the 90 minute classes (63.8%)

However, it was unclear whether parents saw these as merely as *true*, or as both *true and beneficial*. Some parents reported these as benefits because, "of course there were be more time for discussions... more time with the teachers... and opportunity to learn more in one day, because students were in class for 90 minutes instead of 45." However, they weren't sure whether these things actually took place in their children's classrooms. Survey questions should be revised to make this more clear for future use. The 70.5% opinion that their children did better academically given in the qualitative portion of the survey conflicted with answers given by parents on the before and after Likert-type scale question on academic change where results indicate that only 16.8% of the parents felt that there was an improvement in their children's academic performance. One possible explanation for this discrepancy could be in the degree of improvement the parents perceived. A slight improvement might be enough for them to check the benefit of improved academics in the qualitative section of the survey. In contrast, when asked to reply on a scale of 1 to 5, parents may have circled 3 (average), for example, for academic performance in both traditional and block scheduling. A child can improve academically and still not leave the "average" category.

Most of the effects of block scheduling reported qualitatively yielded mixed results. Responses to a request for additional comments indicated that another benefit noticed by six parents was that the attitude of their children toward school had been positively affected by block scheduling. Although six parents felt that their slower learners were able to get extra help, making it easier for this type of student to achieve academically, 16 parents thought that block scheduling was not appropriate for slower learners, those with short attention spans, or younger students.

Better student-teacher relationships were also indicated as a benefit by four parents. However, two parents felt that conflicts in student-teacher relationships were magnified by the amount of concentrated time they spent together.

Preparation for college was considered a benefit of block scheduling by four parents, but two other parents felt that block scheduling did not allow for adequate college preparation. One parent noted that the high school semesters are out of sync with college semesters and this causes a problem for students who take Regents and graduate in January. Most colleges are already one week into the spring semester at this point.

Three parents wrote that their children experienced less stress, while two others reported more stress with block scheduling. Three parents felt that block scheduling enabled their children to study subjects more in depth, while three other parents felt that their children were being asked to absorb too much information at once in the block class, and two felt that time was wasted with too much free time, rather than in-depth study, in block classes. Two parents felt that students did better on the Regents exams with the traditional schedule since they had all year to prepare for them, while two other parents felt that the traditional schedule forced students to take too many Regents at one time.

Parents were also divided on whether or not block scheduling provided more course options. 37.1% felt that block scheduling made it possible to offer more courses and 10.5% felt that not enough courses of substance were available with block scheduling. One parent wrote that "the extra courses offered are things like knitting and chess – a waste of time." Three other parents said that, although they thought block scheduling offered more courses, those courses were not always available when they were needed.

Many parents felt that they did not know enough about the classroom environment itself to comment on discipline changes within the classroom. About a third of the parents felt that classroom discipline was more frequent in the traditional setting, and only slightly fewer of the parents felt that block scheduling required more classroom discipline.

Perceived Problems of Block Scheduling

There were several problems that parents associated with block scheduling. Sixty percent of the parents responding indicated that some sequential courses, such as math and foreign languages, were not scheduled consecutively and their children did not retain the material taught in one sequence long enough to do well in the next, especially if there was longer than one semester in-between them. According to parents, the gap between sequences also contributed to student failure on Regents exams.

Another major problem seen by parents was the amount of class time lost when their children missed classes due to personal illness, teacher illness, and/or snow days. Each actual day missed with a block schedule equals two full days of classes under traditional scheduling. As a result, during a hard winter (flu, snow) students are less prepared for Regents exams and a fewer percentage pass them.

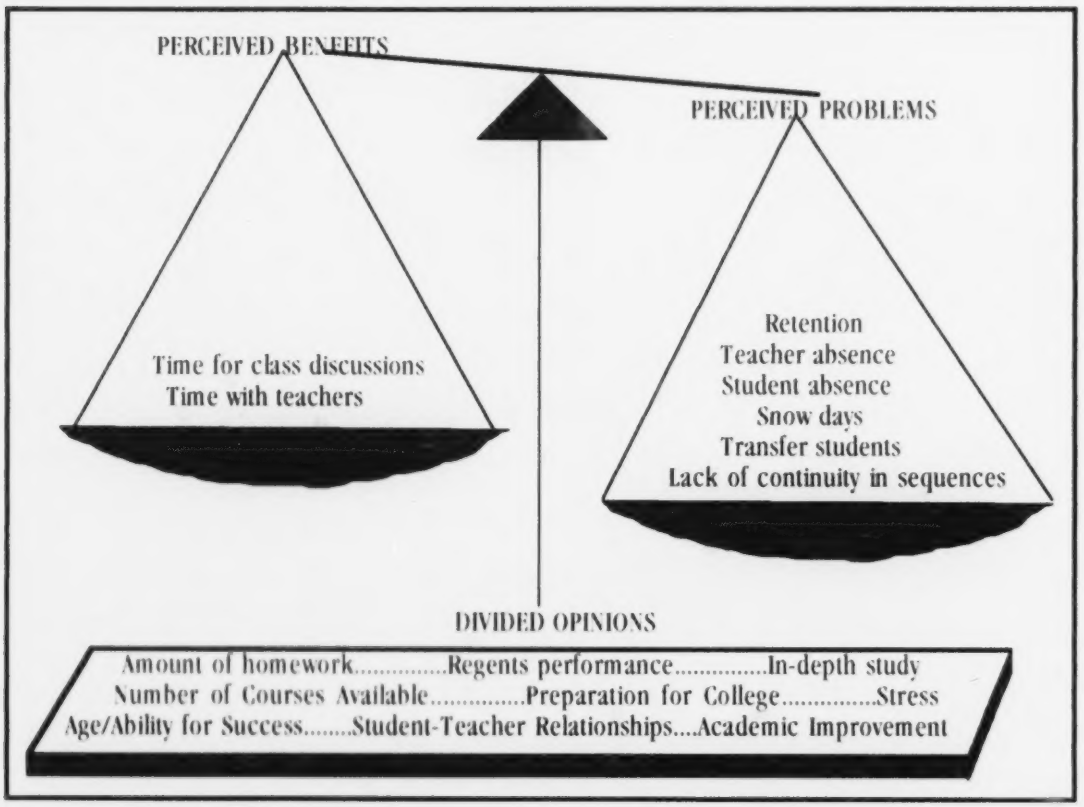
The third largest problem parents reported was that many of the courses were less enjoyable for their children (21.9%) due to boredom with the same subject and/or teaching method for 90 minute periods. The traditional 45 minute class was considered more enjoyable for students by 19% of the parents responding.

During a phone conversation, one parent complained about the difficulty experienced when transferring from another school district. This 16 year old student had moved to the district in this study in December but was not able to begin classes until January, since most courses were reviewing for final exams until that time. The parent was worried that this student would decide being out of school was preferable to being in school during this temporary lapse in school attendance. The transfer from a school using traditional, year-long courses to a school using block scheduling with semester-long courses also meant that this student would only be able to finish half of the courses begun at the traditional school.

Although parents felt that block scheduling attempted to solve the major problems of traditional scheduling – time wasted between classes, difficulty handling so many subjects at one time, and surface learning – they reported that block scheduling nullified the benefit of more homework children had had with the traditional schedule. Several parents also felt that students retained the information better with the traditional schedule since material was reinforced over the entire year rather than only one semester and feel that this also allows time for students to go through stages of intellectual development. One parent commented that "students understand by May what they can't understand in September." Parents also liked the continuity of sequential coursework in the traditional schedule and felt that this contributed to the fact that their children scored higher on the Regents exams under traditional scheduling.

Many parents felt that they had seen administrative, social and economic benefits to block scheduling but no clear academic benefits. Parents believe that the teachers are the key component in the success or failure of block scheduling. It is the teachers that make the class interesting or boring, cover necessary material or give too much free time, allow breaks or ignore student fatigue, are easy graders or realists, and who set an example in attendance. A diagram of overall parent opinion is given in Figure 6 below.

Figure 6: Parent Opinion of Block Scheduling based on Perceptions of Specific Benefits



IMPLICATIONS

Parents are an important, although often neglected, part of the school community. Schools depend on parental support in order to pass budgets, raise money for "extras" through bake sales and book fairs, and create a cooperative environment in which to educate students. Support from parents is often vital to the success of important educational reforms. Since the average parent in this district attended no meetings on block scheduling, and there was no correlation in this study between the number of meetings attended and support for block scheduling, perhaps schools considering a major reform such as block scheduling should consider other avenues of communication with the community.

This study also showed that the majority of parents support block scheduling but do so without clear academic justification (compare Figure 5 and Figure 6). It is possible that parents weigh variables such as time with teachers and time for important class discussions more heavily than they do academic or behavioral improvement. Or, it is possible that the parents in this study see no need for improvement in these areas. Further research is needed to show whether parent opinion simply reflects student opinion, is favorable merely to the idea of change itself, or whether there is empirical evidence in support of academic, social, and economic benefits cited by block scheduling theory.

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